

**REMARKS**

Claims 1-8, 24, 25, 29-31, 34-36 and 40-57 were previously pending in this application. Claims 3, 4, 10-13, 24, 25, 29-31, 36 and 41-57 have been withdrawn from consideration by the Examiner as pertaining to a non-elected invention. With entry of this amendment, claim 1 will be amended to include the subject matter of claims 10-13, which have been canceled. Thus, claims 9-23, 26-28, 32, 33, and 37-39 are canceled. Also, applicants request entry of new claims 58-91. Support for new claim 58 is found in the present specification at, *inter alia*, page 13, line 24 to page 14, line 13 and page 14 lines 14 to 23. Claims 59-91 parallel pending claims 2-8, 24, 25, 29-31, 34-36 and 40-57, respectively.

**Rejections Under 35 U.S.C. §102(b)**

Claims 1, 2, 5-9, 34 and 35 stand rejected under 35 U.S.C. 102(b) as being anticipated by Adams, U.S. Patent No. 5,150,812. Adams cannot anticipate the presently claimed invention because it does not teach or have all of the properties of the pending claims. Adams fails to teach that the reinforcing fibers of the outer shell form a layer of reinforcing fibers arranged at an angle within a range from  $\pm 5^\circ$  to  $\pm 50^\circ$  and a layer of reinforcing fibers arranged at an angle within a range from  $\pm 75^\circ$  to  $\pm 105^\circ$  within a range of 1.0 to 1.0-2.0 improve the in-plane isotropy of the outer shell. Also, Adams does not have a layer of reinforcing fibers arranged within a range of  $\pm 30^\circ$  to  $\pm 60^\circ$  which act to enhance the impact resistance. Accordingly the combination of “carbon fiber” and “the volume ratio of reinforcing fibers in the layer of reinforcing fibers arranged at an angle within a range from  $\pm 0$  to  $\pm 15$  to that in the layer of reinforcing fibers arranged at an angle within a range from  $\pm 75$  to  $\pm 105$  to that in the layer of reinforcing fibers arranged at an angle within a range from  $\pm 30$  to  $\pm 60$ , with reference to the axial direction of the pressure vessel, is within a range of 1 to 1.5-2.5 to 0.2-1.2” is not taught or inherently possessed by Adams.

**Rejections Under 35 U.S.C. §103(a)**

Claims 1, 2, 5-8, 34 and 35 stand rejected under 35 U.S.C. 103(a) as being obvious over Adams in view of Shigetoh. Claim 40 stands rejected under 35 U.S.C. 103(a) as being obvious over Adams in view of Shigetoh and Grocery. Applicants traverse these rejections for the following reasons.

To establish a *prima facie* case of obviousness, there must be (1) motivation to combine or modify references, (2) a reasonable expectation of success and (3) a teaching or suggestion of all the elements of the claims. If applicants can demonstrate that at least one of these elements has not been met, the obviousness rejection is not sustainable. Applicants contend that for the reasons described above, none of the references, either alone or in combination, teach or suggest all of the elements of the claims. Moreover, the features of the present claims made it possible to provide a pressure vessel not only light in weight, but also excellent in retaining its internal pressure against repetitive impacts, with excellence in reliability. Please see Example 1 of the present specification. Since carbon fiber is brittle, none of the cited references suggests that a pressure vessel not only light in weight, but also excellent in retaining its internal pressure against repetitive impacts can be made of CFRP. Thus, applicants contend that none of the cited references would either motivate one to arrive at the present invention or give a reasonable expectation of its success.

**Conclusion**

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to

Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date December 4, 2003



FOLEY & LARDNER  
Customer Number: 22428  
\*22428\*  
22428

Matthew E. Mulkeen  
Attorney for Applicant  
Registration No. 44,250

PATENT TRADEMARK OFFICE  
Telephone: (202) 672-5571  
Facsimile: (202) 672-5399